

AMENDMENTS TO THE CLAIMS

1.– 21. (Cancelled)

22. (Previously Presented) The method of claim 30, wherein the array has a variable sampling rate.

23. (Previously Presented) The method of claim 22, further comprising:
changing the sampling rate based upon a characteristic of the two dimensional digital image data.

24. (Previously Presented) The method of claim 22, further comprising:
increasing the sampling rate to process said image data with increased resolution.

25. (Previously Presented) The method of claim 22, further comprising:
changing the sampling rate for at least one point along the image plane.

26. (Previously Presented) The method of claim 30, wherein the sensor array may be moved at a variable velocity.

27. (Previously Presented) A method for generating two dimensional digital image data in a digital camera, the method comprising:
directing light from a source toward an image plane within said digital camera, wherein the image plane having first and second dimensions;
providing a high resolution sensor array which span the first dimension of the image plane, wherein the sensor array may be moved at a variable velocity;
moving the sensor array through a portion of the second dimension of the image plane;
collecting sampling data samples from the light received by the sensor at a sampling rate;
processing the data samples into the two dimensional digital image data; and
increasing the variable velocity to accurately process a dynamically changing image.

28. (Previously Presented) The method of claim 30 wherein said image plane comprise a long dimension and a short dimension wherein said sensor array spans said long dimension and is moved across the length of said short dimension.

29. (Previously Presented) The method of claim 30 wherein said image plane comprise a long dimension and a short dimension wherein said sensor array spans said short dimension and is moved across the length of said long dimension.

30. (Previously Presented) A method for generating two dimensional digital image data in a digital camera, the method comprising:

directing light from a source toward an image plane within said digital camera, wherein the image plane having first and second dimensions;

providing a first and a second high resolution sensor array that span the first dimension of the image plane, wherein the first array is located at a one end of said image plane and the second array is located in a middle of said image plane;

moving each sensor array through a portion of the second dimension of the image plane, wherein the moving comprises:

moving the first array and the second array to the direction of the other end of the image plane at the same time; and

ceasing moving the first array and the second array when the first array is located in the middle of the image plane and the second array is located at the other end of the image plane;

collecting sampling data samples from the light received by the sensor at a sampling rate; and

processing the data samples into the two dimensional digital image data.

31. (Cancelled)